

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	43798	((spin adj bulb) or mr or mre or DOMR or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or g11b005/39. ipc. or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5 or piggyback or ((composite or combination or merged) adj4 head\$1))	EPO; JPO; DERWENT	OR	OFF	2004/12/23 09:30
L2	791643	ruthenium or Ru or ferrimagnetic\$5 or ferri adj2 magnetic\$5 or antiparallel or anti adj parallel or ((antiferromagnetic or AFM or anti adj ferromagnetic\$5) adj2 coupling\$1) or APC or AAF or SAF or synthetic\$4 adj2 (antiferromagnet\$5 or anti adj ferromagnet\$5) or artificial adj2 (anti adj ferromagnet\$5 or antiferromagnet\$5)	EPO; JPO; DERWENT	OR	OFF	2004/12/23 09:30
L3	1997	1 and 2	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:11
L4	1695	free adj layer\$1	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:12
L5	208	3 and 4	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:12
L6	20604	exchange adj tab\$1 or AFM or antiferromag\$8 or anti adj ferromag\$6 or pinning or PtMn or FeMn or IrMn or FeMnRh or InMn or RhMn or RuMn or NiMn or PdPtMn or CrPdMn or NiO or Pt adj Mn or Fe adj Mn or Ir adj Mn or Fe adj Mn adj Rh or In adj Mn or Rh adj Mn or Ru adj Mn or Ni adj Mn or Pd adj Pt adj Mn or Cr adj Pd adj Mn or Ni adj O	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:47
L7	148	5 and 6	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:14

L8	318908	(magnet or magnets or barkhausen or ((hard or vertical\$4 or longitudinal\$4) adj2 bias\$4) or mdc or domain\$ or barkhausen or popcorn or pop adj corn or wiggle or exchange adj tab\$1 or multidomain\$1 or LBS or (sole near3 magnetization\$1) or unidirectional)	EPO; JPO; DERWENT	OR	OFF	2004/12/23 09:30
L9	229	3 and 8	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:28
L10	35	7 and 9	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:31
L11	75310	Cpp or (current adj2 perpendicular adj2 plane) or tunnel\$4	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:49
L12	16	9 and 11	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:31
L13	9	12 not 10	EPO; JPO; DERWENT	OR	OFF	2004/12/23 08:40
L14	20455	(mr or DOMR or mre or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or DSV or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5 or piggyback or ((composite or combination or merged) adj4 head\$1)).ti,ab,clm. or "360/113" or 360/313-327.33.ccls. or 428/692-693.ccls. or 338/32\$2. ccls. or 324/207.21.ccls. or 324/252.ccls. or 365/171.ccls. or 365/173.ccls.	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:46
L15	1493	(ruthenium or Ru or ferrimagnetic\$5 or ferri adj2 magnetic\$5 or antiparallel or anti adj parallel or ((antiferromagnetic or AFM or anti adj ferromagnetic\$5) adj2 coupling\$1) or APC or AAF or SAF or synthetic\$4 adj2 (antiferromagnet\$5 or anti adj ferromagnet\$5) or artificial adj2 (anti adj ferromagnet\$5 or antiferromagnet\$5)) same (free adj2 layer\$1)	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:44

L16	1431	14 and 15	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:46
L17	440345	(magnet or magnets or barkhausen or ((hard or vertical\$4 or longitudinal\$4) adj2 bias\$4) or mdc or domain\$ or barkhausen or popcorn or pop adj corn or wiggle or exchange adj tab\$1 or multidomain\$1 or LBS or (sole near3 magnetization\$1) or unidirectional)	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:47
L18	1046	16 and 17	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:47
L19	32483	exchange adj tab\$1 or AFM or antiferromag\$8 or anti adj ferromag\$6 or pinning or PtMn or FeMn or IrMn or FeMnRh or InMn or RhMn or RuMn or NiMn or PdPtMn or CrPdMn or NiO or Pt adj Mn or Fe adj Mn or Ir adj Mn or Fe adj Mn adj Rh or In adj Mn or Rh adj Mn or Ru adj Mn or Ni adj Mn or Pd adj Pt adj Mn or Cr adj Pd adj Mn or Ni adj O	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:49
L20	1023	18 and 19	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:49
L21	83288	Cpp or (current adj2 perpendicular adj2 plane) or tunnel\$4	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:50
L22	525	20 and 21	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:50
L23	112052	((magnet or magnets or barkhausen or ((hard or vertical\$4 or longitudinal\$4) adj2 bias\$4) or mdc or domain\$ or barkhausen or popcorn or pop adj corn or wiggle or exchange adj tab\$1 or multidomain\$1 or LBS or (sole near3 magnetization\$1) or unidirectional)).ti,ab,clm.	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:50
L24	181	22 and 23	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:50
L25	22	@ad<="20000802" and 24	US-PGPUB; USPAT	OR	OFF	2004/12/23 08:51

L26	769	((spin adj bulb) or mr or mre or DOMR or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or g11b005/39. ipc. or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5 or piggyback or ((composite or combination or merged) adj4 head\$1))	IBM_TDB	OR	OFF	2004/12/23 09:30
L27	225	ruthenium or Ru or ferrimagnetic\$5 or ferri adj2 magnetic\$5 or antiparallel or anti adj parallel or ((antiferromagnetic or AFM or anti adj ferromagnetic\$5) adj2 coupling\$1) or APC or AAF or SAF or synthetic\$4 adj2 (antiferromagnet\$5 or anti adj ferromagnet\$5) or artificial adj2 (anti adj ferromagnet\$5 or antiferromagnet\$5)	IBM_TDB	OR	OFF	2004/12/23 09:30
L28	45	26 and 27	IBM_TDB	OR	OFF	2004/12/23 09:30
L29	3237	(magnet or magnets or barkhausen or ((hard or vertical\$4 or longitudinal\$4) adj2 bias\$4) or mdc or domain\$ or barkhausen or popcorn or pop adj corn or wiggle or exchange adj tab\$1 or multidomain\$1 or LBS or (sole near3 magnetization\$1) or unidirectional)	IBM_TDB	OR	OFF	2004/12/23 09:30
L30	9	28 and 29	IBM_TDB	OR	OFF	2004/12/23 09:30